

# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Offic

Addr ss: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

10

12/15/00

APP	LICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTO	ORNEY DOCKET NO.
	dayeta,	044 07/1	7/00 POMPETZKI	iд	9350-0169-0
Γ.	022850 HM22/1215 TOOLON SPIVAK MOCLELLAND MAIER & NEUSTADT FOURTH FLOOR			EXAMINER PRICE, E	
				ART UNIT	PAPER NUMBER
	1755 JEFFERSON DAV ARLINGTON VA 22202			1621	2
				DATE MAILED:	45745760

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

	Application No.						
		Applicant(s)					
Office Action Summary	09/618,044	POMPETZKI ET AL.					
, and the same of	Examiner	Art Unit					
	Elvis O. Price	1621					
The MAILING DATE of this communication appe Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD-FOR REPLY-IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any  Status							
1) Responsive to communication(s) filed on							
	s action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-12</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) ☐ Claims are subject to restriction and/or €	election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are objected to by the Examiner.							
11) The proposed drawing correction filed on is: a) approved b) disapproved.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. § 119							
13) Acknowledgment is made of a claim for foreign p	priority under 35 U.S.C. \$ 110(a)	(4)					
a)⊠ All b)□ Some * c)□ None of:							
1 Certified copies of the priority documents h	nave heen received						
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the international Bures	application from the international Bureau (PCT Rule 17.2/a)\						
* See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for demostic priority and the SE NO. 2. 2. 4.4.4.4.							
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).							
Attachment(s)							
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449) Paper No(s)							

U.S. Patent and Trademark Office PTO-326 (Rev. 9-00) Application/Control Number: 09/618,044

Art Unit: 1621

### **DETAILED ACTION**

Claims 1-12 are pending in the application.

## **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

The information disclosure statement filed complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been placed in the application file and the information referred to therein has been considered as to the merits.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn et al. {U.S. Pat. 5,684,215}.

Applicants claim a process for the hydrogenation of acetone, which comprises: conducting the liquid-phase hydrogenation of acetone in at least two hydrogenation process stages, thereby preparing isopropanol product.

Horn et al. teach a one stage process for the liquid-phase hydrogenation of organic carbonyl compounds such as acetone, methyl ethyl ketone, cyclohexanone,

Application/Control Number: 09/618,044

Art Unit: 1621

etc., to produce the corresponding alcohols (Col. 1. lines 58-67 and Col. 2. lines 1-15). Horn et al. further teaches that the reaction is carried out at 60°C to 150°C over a Al<sub>2</sub>O<sub>3</sub> supported catalyst containing nickel and at a pressure of 20 to 100 bar (Col. 3 lines 49-57 and Col. 4 lines 13-50). The difference between the applicants' claimed invention and the Horn et al. reference is that the range of the reaction's temperature and pressure of the reference is greater than that of the applicants' and Horn et al. perform the reaction in a one stage process.

It would have been clearly *prima facie* obvious to one of ordinary skill in the art to prepare isopropanol by hydrogenating acetone, in the liquid-phase, in at least two hydrogenation process stages because Horn et al. teaches that acetone can be hydrogenated to produce isopropanol, in the liquid-phase, in a one stage process.

Thus, one of ordinary skill in the art would have been movitated to prepare isopropanol by hydrogenating acetone, in the liquid-phase, in at least two hydrogenation process stages. The instantly claimed process would therefore have been obvious to one of ordinary skill in the art.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Fukuhara et al. {U.S. Pat. 5,081,321}, Sargent {U.S. Pat. 2,983,734} and Mertzweiller et al. {U.S. Pat. 3.978.149}.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvis O. Price whose telephone number is 703 605-1204. The examiner can normally be reached on 8:30 am to 5:00 pm; Mon-Fri.

Art Unit: 1621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 703 308-4532. The fax phone numbers for the organization where this application or proceeding is assigned is 703 308-4556 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1235.

**EOP** 

December 13, 2000

Supervisory Patent Examiner

Technology Center 1600